

**B.Sc. IN MEDICAL LABORATORY
TECHNOLOGY (BMLT)**

00383

Term-End Examination

December, 2016

**BAHI-011 : APPLIED SEROLOGY, IMMUNOLOGY
AND MICROBIOLOGY**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any six questions. Question no. 8 is compulsory.

1. Define immunity. Briefly discuss acquired and innate immunity. 2+6=8
2. Describe the different types of ELISA. Critically discuss the principles and advantages of ELISA. 2+3+3=8
3. Define immunoglobulins. Discuss in detail the different types of antigen-antibody interactions. 2+6=8
4. Define gel electrophoresis. Discuss in detail the application of gel electrophoresis. 2+6=8
5. Define hypersensitivity. Briefly discuss the delayed type of hypersensitivity. 2+6=8

6. What is flow cytometer ? Discuss in detail its principle and applications. $2+3+3=8$
7. Define Polymerase Chain Reaction (PCR). What is real time PCR ? Discuss critically the applications of PCR. $2+2+4=8$
8. Write short notes on any *five* of the following : $5 \times 6 = 30$
- (a) Hypersensitivity
 - (b) Indirect Immunofluorescence Assay (IFA)
 - (c) Hospital Acquired (Nosocomial) Infection (HAI)
 - (d) Immune Paralysis
 - (e) Automated Microbial Detection System
 - (f) Bacteriological Examination of Water
 - (g) Automation in Microbiology Laboratory
 - (h) Immune Response
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